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ADA89468
ID   ADA89468 standard; protein; 895 AA.
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AC   ADA89468;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Staphylococcus aureus antigenic protein #7.
XX
KW   antigenic protein; vaccine; Staphylococcus aureus; pathogenic organism;
KW   antibacterial; neuroprotective; immunosuppressive; antiinflammatory;
KW   antiulcer; immunostimulant; ophthalmological; pathogenic microbe;
KW   bacteraemia; septic shock; organ infection; skin infection;
KW   bacterial basal colonisation; bacteria) eye infection; septicaemia;
KW   tuberculosis; food poisoning; blood infection; peritonitis; endocarditis;
KW   sepsis; meningitis; pneumonia; stomach ulcer; gonorrhoea; toxic shock;
KW   necrotising fasciitis, impetigo; histoplasmosis; Lyme disease;
KW   gastro-enteritis; dysentery; shigellosis; skin disorder.
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OS   Staphylococcus aureus.
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PN   WO2003011899-A2.
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PD   13-FEB-2003.
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PF   02-AUG-2002; 2002WO-GB003606.
XX
PR   02-AUG-2001; 2001GB-00018825.
PR   09-JAN-2002; 2002GB-00000349.
XX
PA   (UYSH-) UNIV SHEFFIELD.
PA   (BIOS-) BIOSYNEXUS INC.
XX
PI   Foster S, Mond J,  Clarke S.  Medowell P,  Brummel K;
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DR   WPI; 2003-256434/25.
XX
PT   New antigenic polypeptides from Staphylococcus aureus or S. epidermidis,
PT   useful as a vaccine for immunizing humans against e.g. bacteremia, septic
PT   shock, septicemia, tuberculosis, meningitis, pneumonia, gonorrhea or
PT   impetigo.
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PS   Claim 4; Page 124; 189pp; English.
XX
CC   The present invention describes an antigenic protein or its part, which
CC   is for use as a vaccine. The antigenic protein is encoded by an isolated
CC   DNA molecule of Staphylococcus aureus or S. epidermidis partial gene
CC   sequences (designated dnaSA and dns SB, respectively, and which encodes a
CC   protein expressed by a pathogenic organism. Also described: (1) a vaccine
CC   composition comprising at least one antigenic protein; (2) a method of
CC   immunising an animal against a disease or condition caused by a
CC   pathogenic microbe by administering the antigenic protein or the vaccine;
CC   (3) an antibody or its binding part obtainable by the method above; (4)
CC   preparing a hybridoma cell line producing monoclonal antibodies; (5) a
CC   hybridoma cell line produced by the method of (4); and (6) identifying
CC   opsonic antigens expressed by a pathogenic microbe. The antigenic
CC   proteins have antibacterial, neuroprotective, immunosuppressive,
CC   antiinflammatory, antiulcer, immunostimulant and ophthalmological
CC   activities, and can be used in vaccines. The antigenic proteins or
CC   vaccines are used for immunising an animal (specifically a human)
CC   against a disease or condition caused by a pathogenic microbe, e.g.
CC   bacteraemia, septic shock, organ infection, skin infection, bacterial
CC   basal colonisation, bacterial eye infections, septicaemia, tuberculosis,
CC   bacteria-associated food poisoning, blood infections, peritonitis,
CC   endocarditis, sepsis, meningitis, pneumonia, stomach ulcers, gonorrhoea,
CC   strep throat, streptococcal-associated toxic shock, necrotising
CC   fasciitis, impetigo, histoplasmosis, Lyme disease, gastro-enteritis,
CC   dysentery, shigellosis, S. aureus-associated septicaemia, food-poisoning,
CC   skin disorders, S. epidermidis-associated septicaemia, peritonitis or
CC   endocarditis. The present sequence represents a S. aureus antigenic
CC   protein sequence from the present invention.
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SQ   Sequence 895 AA;

 Query Match          99.9%;  Score 4660;  DB 6;  Length 895;
 Best Local Similarity   99.9%;  Pred. No. 8.6e-277;
 Matches  894;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 MFKHHPKLRSFYSIRKSTLGVASVIVSTLFLITSCHQAQAAEMTNTSDKISEMQNNNATT 60
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MFKHHPKLRSFYSIRKSTLGVASVIVSTLFLITSQHQAQAAESMTNTSDKISEMQNNNATT 60

SEQ ID NO.1

Qy         61 TQPPKDTNQTQPATQPANTAKNYPAADESLKDAIKDPALENKEHDIGPRSQVNPQLLDKN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 TQPPKDTNQTQPATQPANTAKNYPAADESLKDAIKDPALENKEHDIGPRSQVNPQLLDKN 120

Qy        121 NETQYYHFSIKDPADVYYTKKKAEVELDINTAETWKKPEVYENNQKLPVRLVSYSPSVPE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 NETQYYHFSIKDPADVYYTTKKAEVELDINTAETWKKPEVYENNQKLPVRLVSYSPSVPE 180

Qy        181 DMAYIRFPVSDQTQELKIVSSTQIDDGETNTWDYTKLVPAKPIVNDPSLVKSDTNDAVVT 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 DMAYIRFPVSDQTQELKIVSSTQIDDGETNTWDYTKLVPAKPIVNDPSLVKSDTNDAVVT 240

Qy        241 NDQSSSVASKQTNTNTSMQNTSTINNANNQPQATTNMSQPAQPKSETNAQQASQPAHET 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 NDQSSSVASKQTWTNTSMQNISTINNANNQPQATTNMSQPAQPKSETNAQQASQPAHET 300

Qy        301 NSWNTNTMDKTNESSNQSDVNQQYPPADESLQDAIKDGPAIIDKSHTADNWRPIDPQKNDK 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NSWGTNTMDKTNESSNQSDVNQQYPPADESLQDAIKDPAIIDKSHTADNWRPIDPQKNDK 360

Qy        361 GERQFHYASTVBPATVIFTKTGPIIRLGLKTASTWKKPSVYEGDDKLPVELWSYDSDKD 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 GERQFHYASTVBPATVIFTKTGPIIRLGLKTASTWKKPSVYEGDDKLPVELWSYDSDKD 420

Qy        421 YAYIRFPVSNGTREVKIVSSIEYGENIHEDYDTLMVFAQFITNWPDDYVDEETYNLQKL 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 YAYIRFPVSNGTREVKIVSSIEYGENIHEDYDTLMVFAQFITNPDDYVDEETYNLQKL 480

Qy        481 LAPYHKAKTLERQVYELEKLQEKLPEKYKAEYKKKLDQTRVSLADQVKSAVTEFENVTPT 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 LAPYHKAKTLERQVYELEKLQEKLPEKYKAEYKKKLDQTRVSLADQVKSAVTEFENVTPT 540

Qy        541 NDQLTDLQEAHFVVFESEENSESVMDGFVEHSFTTATLNQQKVTVMKTKDDSYKKDLIVE 600
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 NDQLTDLQEAHFVVFESEENSESVMDGFVEHSFTTATLNQQKVTVMKTKDDSYKKDLIVE 600

Qy        601 GKRVTTVSKDPKNNSRTLIFPYIPDKAVYNAIVKVVVANIGYKGQYHVRIINQDINTKDD 660
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        601 GKRVTTVSKDPKNNSRTLIFPYIPDKAVYNAIVKVVVANIGYKGQYHVRIINQDINTKDD 660

Qy        661 DTSQNNTSEPLMVQTGQEGKVADTDVAENSSTATNPKDASDKADVIEPSSDVVKDADNNI 720
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        661 DTSQNNTSEPLMVQTGQEGKVADTDVAENSSTATNPKDASDKADVIEPSSDVVKDADNNI 720

Qy        721 DKDVQNDVDHLSDMSDNNHFDKYDLKEMDTQTIAKDTDRNVDKDADNSVGMSSNVDTDKDS 780
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        721 DKDVQNDVDHLSDMSDNNHFDKTDLKEMDTQTIAKDTDRNVDKDADNSVGMSSNVDTDKDS 780

Qy        781 NKNKDKVIQLNHIADKNNHTGKAAKLDVVKQNYNNTDKVTDKTTEHLPSDIEKTVDKTV 840
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        781 NKNKDKVIQLNHIADKNNHTGKAAKLDVVKQNYNNTDKVTDKTTEHLESDIEKTVDKTV 840

Qy        841 KTKEKAGTPSKENKLSQSKMLPKTGETTSSQSWWGLYALLGMLALFIPKFRKESK 895
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        841 KTKEKNGTPSKENKLSQSKMLPKTGETTSSQSWWGLYALLGMLALFIPKFRKESK 895
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